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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/199,447 11/25/98 FUJITA

Y XA-8993

020230
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IM62/0611

EXAMINER

JOHNSON, J

ART UNIT

PAPER NUMBER

1721

DATE MAILED: 06/11/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/199,447

Applicant(s)

Fujita et al.

Examiner

J. Johnson

Group Art Unit

1721

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-3 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-3 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Shiraishi et al.

Shiraishi et al, U.S. Patent 5,656,582, teach a rust preventive lubricating oil which prevents bearings from rusting without adversely affecting various characteristics of bearings such as torque, sound and life (column 1, lines 5-9). The rust preventive oil contains a rust-preventive agent and a base oil as essential components. This base oil must contain an ether oil (column 1, lines 57-60). Viscosity of the ether oil per se and ether oil-containing mixtures used as a base oil is usually 10-100 mm²/s @ 40°C (column 3, lines 8-11). The rust preventive lubricating oils are suitably used for bearings provided with an outer ring having an outer ring raceway track on its inner periphery, an inner ring having an inner raceway track on its outer periphery, a plurality of balls provided between the outer ring track and the inner ring track and a cage which holds the balls so that they can freely roll, especially small bearings such as sealed ball bearings (column 4, lines 7-14).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraishi et al as applied to claim 1 above, and further in view of Noguchi et al and Dunfield et al.

Shiraishi et al is relied on as cited above but differ from the instant claims in not disclosing that the inner and outer races are made of steel and the roller bearings are made of ceramics or "super-hard" alloy.

Noguchi et al, U.S. Patent 5,882,122, teach that ball bearings made of ceramic or a hard metal. having a surface hardness of Hv 950-Hv 1,800 (column 9, lines 34-38).

Dunfield et al, U.S. Patent 5,844,748, teach that ball bearings typically having inner and outer races made of steel (column 2, lines 5-6). Ceramic bearing balls are taught in column 8, line 43 to column 9, line 27.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the rust preventive lubricating oil of Shiraishi et al in a roller bearing wherein said roller bearing has inner and outer races made of steel and bearing balls made of ceramic or "super-hard" alloy as taught by Noguchi et al and Dunfield et al.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

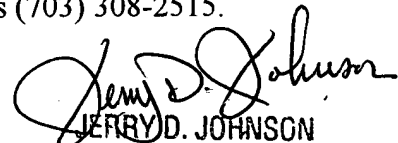
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Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is confusing. Specifically, there is no basis to refer to "the oil film" or "grease" in the claim.

In claim 3, the term "super-hard alloy" is indefinite.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (703) 308-2515.


JERRY D. JOHNSON
PRIMARY EXAMINER
GROUP 1100

JDJ
June 8, 1999